

Use these links to rapidly review the document
[Table of Contents](#)

As filed with the Securities and Exchange Commission on August 19, 2003

Registration No. 333-106632

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Wave Systems Corp.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
Incorporation or organization)

13-3477246

(I.R.S. Employer
Identification No.)

**480 Pleasant Street
Lee, Massachusetts 01238
(413) 243-1600**

(Address, including zip code, and telephone number, including
area code, of registrant's principal executive offices)

**Steven Sprague
President and Chief Executive Officer
Wave Systems Corp.
480 Pleasant Street
Lee, Massachusetts 01238
(413) 243-1600**

(Name, address, including zip code, and telephone
number, including area code, of agent for service)

Copy to:

Neil W. Townsend, Esq.
 Bingham McCutchen LLP
 399 Park Avenue
 New York, New York 10022-4689
 (212) 705-7700

Approximate date of commencement of proposed sale to public: At such time or times after the Registration Statement becomes effective as the Selling Holders may determine.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If the delivery of the prospectus is expected to be made pursuant to Rule 434 under the Securities Act, check the following box. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Class A Common Stock, \$.01 par value	12,593,880 Shares	\$0.96(1)	\$12,090,125(1)	\$1,112.29(2)

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c), based on the average of the high and low prices reported on the Nasdaq National Market on May 9, 2003.

(2) This fee was paid on May 15, 2003, as part of the Amendment No. 2 to Form S-3 (File No. 333-99469) in which we originally included these 12,593,880 shares.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 19, 2003

PROSPECTUS

12,593,880 Shares

WAVE SYSTEMS CORP.

Class A Common Stock

This prospectus relates to 12,593,880 Shares of Class A common stock of Wave Systems Corp. We are registering these shares on behalf of the selling stockholders to be offered and sold by them from time to time. We are not selling any of these shares and will not receive any proceeds from the sale of these shares. Concurrently, we are registering 1,700,000 shares of Class A common stock on Form S-3 on behalf of Redwave, plc which were issued in connection with an asset acquisition on July 24, 2002. Our Class A common stock trades on The Nasdaq National Market under the symbol "WAVX". The last reported sales price of our Class A common stock on August 15, 2003 was \$3.20 per share.

**Investing in our Class A common stock involves a high degree of risk.
See "Risk Factors" beginning on page 3**

Neither the Securities and Exchange Commission nor any state securities commission has approved of these securities or determined if this prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is August , 2003.

Table of Contents

<u>Prospectus Summary</u>	1
<u>Risk Factors</u>	3
<u>Use Of Proceeds</u>	10
<u>Selling Security Holder</u>	10
<u>Plan Of Distribution</u>	16
<u>Legal Matters</u>	18
<u>Experts</u>	18
<u>Incorporation Of Certain Documents By Reference</u>	20
<u>Item 14. Other Expenses Of Issuance and Distribution</u>	II-1
<u>Item 15. Indemnification of Directors and Officers</u>	II-1
<u>Item 16. Exhibits And Financial Statements And Schedules</u>	II-2
<u>Item 17. Undertakings</u>	II-3

PROSPECTUS SUMMARY

The following is a summary, and should be read as such. This summary is qualified by more detailed information appearing in other sections of the prospectus and the documents incorporated herein by reference, and should be read in conjunction with, the more detailed information and financial information and statements incorporated by reference in this prospectus. Wave Systems Corp. is a development stage company. We have not realized any significant revenues in any quarter since we began our operations in 1988. We do not expect to realize significant revenues for at least the next two fiscal quarters, or until we are successful with our strategy which is to achieve broad market acceptance of our technology as a standard platform for the secure delivery of electronic content, and security services and to build a network of services for this platform. Revenues have been nominal in relation to our expenditures due to the highly complex nature of the technology that we are developing and the early stage nature of the market for products that utilize this technology. As a result, we have experienced a slow pattern of corporate development. You should carefully consider the factors set forth under the caption "Risk Factors".

The Company

Wave Systems Corp. develops, produces and markets hardware and software based digital security products for the Internet and e-commerce. Wave's technology involves the use of encryption, which is the process of making data indecipherable. Our products are designed to secure and protect from unauthorized users, digital information such as users' personal information and content such as music, software, computer games and video using a hardware-based solution.

We began our operations on August 12, 1988 with the concept of developing a means to securely meter digital content and report usage data back to a centralized processing and clearing house that tracks the usage, charges the user and distributes royalties to the publishers of that content; a process known as digital rights management. We have since expanded and modified our technology from a single purpose security chip to our patented, open and programmable digital security infrastructure known as the EMBASSY (EMBedded Application Security System) Trust System (the "ETS"), a complete end-to-end suite of products and services that support hardware-based security and create a Trusted computing environment when implemented exclusively, or in conjunction with traditional security. In addition, we have added to our product offerings a broadband solution for the delivery of rich content such as video and computer games using an internet multicasting model; and digital document signing and storage software that enable legally binding digital signatures to be imbedded onto digital documents with secure storage and management capabilities of those digitally signed documents. These additional product offerings are currently in development. We expect our current products to remain our primary business focus. Wave currently holds twelve patents involving methods for securing digitally stored information and content.

Since our inception in February of 1988, we have devoted substantially all of our efforts and resources to research, feasibility studies, design, development, and market testing of our products and technology. As our research and development activities matured, we have been able to devote increased resources to the creation of content distribution services, market development and the application of our technology to end-user products and services. To date, a viable market for our products and technology has yet to fully develop.

Wave was incorporated in Delaware on August 12, 1988 and was known previously as Indata Corp. Wave changed its name to Cryptologics International, Inc. on December 4, 1989; and to Wave Systems Corp. in January 1993. The principal

executive offices are located at 480 Pleasant Street, Lee, Massachusetts 01238, and the telephone number is (413) 243-1600.

1

The Offering

Class A common stock to be registered	12,593,880 shares
Class A Common Stock to be outstanding after this Offering	53,009,084 shares
Use of Proceeds	Wave will not receive any proceeds from the sale of common stock by the selling stockholders (See Selling Security Holders on page 10).
NASDAQ symbol	WAVX

Wave is making this offering (i) pursuant to two Series H Convertible Preferred Stock Purchase Agreements, each dated as of April 30, 2003 (collectively, the "Series H Purchase Agreements") entered into in connection with the issuance of Wave's Series H Convertible Preferred Stock, par value \$.01 per share (the "Series H Stock") and warrants to purchase Wave's Class A common stock (the "Series H Warrants") to the investors who were a party to either of the Series H Purchase Agreements (collectively, the "Investors") for an aggregate purchase price of \$5,485,000, and (ii) for services rendered by placement agents and sub-placement agents in connection with the issuance of the Series H Stock and Series H Warrants. The Series H Stock is convertible into Wave's Class A common stock.

2

Risk Factors

We have a history of net losses and expect net losses will continue. If we continue to operate at a loss, our business will not be financially viable.

We have experienced significant losses and negative cash flow from operations since our inception. We have not realized a net operating profit in any quarter since we began our operations, nor have we generated any significant operating revenue, as our products have not yet attained commercial acceptance. This is due primarily to the early stage nature of the digital security industry in which we operate. As of June 30, 2003, we had a deficit accumulated during the development stage of approximately \$245.8 million and working capital of approximately \$2.6 million. Given the lack of significant sales of our products and services, there is little basis for evaluating the financial viability of our business and our long-term prospects. You should consider our prospects in light of the risks, expenses and difficulties that companies in their earlier stage of development encounter, particularly companies in new and rapidly evolving markets, such as digital security and online commerce.

To achieve profitability we must, among other things:

- Convince personal computer manufacturers and distributors of movies, games, financial information and other digital data and electronic content over the Internet to modify their offerings to be used with our products and services;
- Convince consumers to choose to order, purchase and accept products using our products and services;

- Continue to maintain the necessary resources, especially talented software programmers;
- Develop relationships with personal computer manufacturers and computer systems integrators to facilitate and to maximize acceptance of our products and services; and
- Raise additional capital to support our operations until we can generate sufficient revenues and cash flows.

If we do not succeed in these objectives, we will not generate revenues; hence, our business will not be sustainable.

We may not be able to fund our operations and continue as a going concern.

Since we began our operations, we have incurred net losses and experienced significant negative cash flow from operations. This is due to the early stage nature of market development for our products and services and the digital security industry as a whole. Wave expects to continue to incur substantial additional expenses associated with continued research and development and business development activities that will be necessary to commercialize our technology. This will likely result in significant losses for the foreseeable future. Considering our current cash balance and Wave's projected operating cash requirements, we anticipate that our existing capital resources will be adequate to satisfy our cash flow requirements into the first quarter of 2004. In order to fund our business through the first quarter of 2004 and beyond, it will be necessary for us to raise additional capital. Wave is uncertain as to the availability of financing from other sources to fund any cash deficiencies. Even if we are successful in raising additional capital, uncertainty with respect to Wave's viability will continue until we are successful in achieving our objectives. Furthermore, although we may be successful at achieving our business objectives, a positive cash flow from operations may not ultimately be realized unless we are able to sell our products and services at a profit. Given the early stage nature of the markets for our products and services, considerable uncertainty exists as to whether or not Wave's business model is viable.

3

We may be unable to raise the \$7,900,000 of additional capital which is necessary to continue as a going concern for the next twelve months.

The current available capital is sufficient to fund Wave through approximately January 15, 2004. Wave continues to evaluate additional financing options, as it will be necessary for us to raise additional capital in order to continue as a going concern, to capitalize on business opportunities and market conditions and to insure the continued development of our technology, products and services. Wave significantly reduced its cash burn rate in May and may do so further. We may pursue additional capital through equity or debt financings. We do not know if additional financing will be available or that, if available, it will be available on favorable terms. If we issue additional shares of our stock, our stockholders' ownership will be diluted, or the shares issued may have rights, preferences or privileges senior to those of our common stock. In addition, if we pursue debt financing we may be required to pay interest costs. If we are not successful in obtaining additional funding, we will be unable to continue our operations, develop or enhance our products, take advantage of future opportunities, respond to competitive pressures and continue as a going concern.

Our market is in the early stage of development so we are unable to accurately ascertain the size and growth potential for revenue is such a market.

The market for our products and services is still developing and is continually evolving. As a result, substantial uncertainty exists with respect to the size of the market for these products and the level of capital that will be required to meet the evolving technical requirements of the marketplace.

Wave's business model relies on an assumed market of tens of millions of units shipping with built-in security hardware. Because this market remains in the early stage of development, there is significant uncertainty with respect to the validity of the predicted size of the market. If the market for computer systems that utilize our products and services does not grow to the extent necessary for us to realize our business plan, we may not be successful.

As this early stage market develops and evolves, significant capital will likely be required to fund the resources needed to meet the changing technological demands of the marketplace. There is uncertainty with respect to the level of capital that

may be required to meet these changing technological demands. If the amount of capital resources needed exceeds our ability to obtain such capital, we may not be a viable enterprise.

Wave is not established in the industry so we may not be accepted as a supplier or service provider to the market.

Wave's offering represents a highly complex architecture designed to solve many of the security issues currently present with e-commerce and with computer systems in general such as identity theft, fraudulent transactions, virus attacks, unauthorized access to restricted networks and other security problems that users of computer systems generally encounter. We are uncertain as to whether the marketplace will accept our solution to these security problems. We will not be successful if the market does not accept the value proposition that we perceive to be present in our products and services.

Although Wave has expended considerable resources in developing technology and products that utilize our technology and business development activities in an attempt to drive the development of the hardware security market, we do not have a track record as a substantial supplier or service provider to consumers of computer systems. Therefore, uncertainty remains as to whether we will be accepted as a supplier to the marketplace.

4

Our products have not been accepted as industry standards which may slow their sales growth.

We believe platforms adopting integrated hardware security into the PC will become the next significant standard in the overall PC marketplace. However, our technologies have not been accepted as industry standards. Standards for trusted computing are still evolving. To be successful, we must obtain acceptance of our technologies as industry standards, modify our products and services to meet whatever industry standards ultimately develop, or adapt our products to be complementary to whatever these standards become. If we fail to do either, we will not be successful in commercializing our technology; and therefore, we will not generate sales to fund our operations and develop into a self-sustaining, profitable business.

If we do not keep up with technological changes, our product development and business growth will suffer.

Because the market in which we operate is characterized by rapidly changing technology, changes in customer requirements, frequent new product, service introductions and enhancements, and emerging industry standards, our success will depend, among other things, upon our ability to improve our products, develop and introduce new products and services that keep pace with technological developments, remain compatible with changing computer system platforms, respond to evolving customer requirements and achieve market acceptance on a timely and cost effective basis. If we do not identify, develop, manufacture, market and support new products and deploy new services effectively and timely, our business will not grow, our financial results will suffer, and we may not have the ability to remain in business.

We may have compatibility issues that could hamper our product delivery.

The ETS is adaptable to most present modes for the delivery of products and information in electronic form, such as CD-ROMs, the Internet and telecommunications devices. However, these modes of product and information delivery in electronic form may be replaced by other distribution technologies that are not compatible with our technology.

The Internet and online commerce over the Internet are at an early stage of development and are rapidly evolving. While the Internet is expected to experience substantial growth in the number of users and amount of traffic, Internet infrastructure may not continue to support the increasing demands placed on it by this growth. Critical issues concerning the Internet remain unresolved and may limit the growth of electronic commerce. Break-downs and slow-downs in Internet traffic may slow expansion of its use. Delays in the deployment of improvements to the infrastructure for Internet access, including higher speed modems and other access devices, also could hinder the development of the Internet. Further, the costs of use of the Internet could increase to a degree that reduces its attraction as a platform for electronic commerce.

Adequate Internet infrastructure and increased online commerce are necessary for us to succeed. If the Internet infrastructure and complementary services are unable to support growth, our business will not develop.

We encounter risks relating to security, system disruptions and computer infrastructure that could compromise

our digital content.

Although we have implemented in our products various security mechanisms, our products and services may nevertheless be vulnerable to break-ins, piracy and similar disruptive problems caused by Internet users. Any of these disruptions would harm our business. Advances in computer capabilities, new discoveries in the field of security, or other developments may result in a compromise or breach of the technology we use to protect products and information in electronic form. Computer break-ins and other disruptions would jeopardize the security of information stored in and transmitted through the

5

computer systems of users of our products, which may result in significant liability to us and may also deter potential customers.

The security, piracy and privacy concerns of existing and potential customers and electronic content providers, as well as concerns related to computer viruses, may inhibit the growth of the Internet marketplace generally and our potential customer base and revenues in particular. A party who is able to circumvent our security measures could misappropriate proprietary electronic content or cause interruptions in our operations and those of our strategic partners. We may be required to expend significant capital and other resources to protect against security breaches or to alleviate problems caused by breaches. Our attempts to implement contracts that limit our liability to our customers, including liability arising from a failure of security features contained in our products and services, may not be enforceable. We currently do not have product liability insurance to protect against these risks.

Competition and competing technologies may render some or all of our products non-competitive or obsolete.

An increasing number of market entrants have introduced or are developing products and services that compete with Wave's. Our competitors may be able to develop products and services that are more attractive to customers than our products and services. Many of our competitors and potential competitors have substantially greater financial, technical and marketing resources than we have. Also, many current and potential competitors have greater name recognition and larger customer bases that could be leveraged to enable them to gain market share or product acceptance to our detriment. Our products compete with conventional information delivery systems, including on-line services, subscription services on CD-ROM, and services on the Internet. We are also aware of other content metering systems that compete directly with our Commerce System, and other current and evolving technologies that provide some of its functionality. Wave's ETS is subject to competition from producers of hardware-based controllers. We compete with producers of software unlocking systems such as Rainbow Technologies, Inc. and Portland Software. In addition to small companies dedicated to specific solutions, many large information industry companies are forming alliances and attempting to take advantage of the information delivery options offered by the Internet. Wave's products also compete with electronic commerce payment technologies developed and offered by IBM InfoMarket Service, Broadvision Inc., Connect, Inc. and Verisign, Inc. In addition, Wave competes with other producers of digital security products including RSA Security, Inc., Aladdin Knowledge Systems, Inc., Ingenico, S. A. and Watchguard Technologies Inc.

Other companies have developed or are developing technologies that are, or may become, the basis for competitive products in the field of security and electronic content distribution. Some of those technologies may have an approach or means of processing that is entirely different from ours. Existing or new competitors may develop products that are superior to ours or that otherwise achieve greater market acceptance than ours. Due to Wave's early stage, and lower relative name recognition compared to many of our competitors and potential competitors, our competitive position in the marketplace is vulnerable.

We have a high dependence on relationships with strategic partners that must continue or our ability to successfully produce and market our products will be impaired.

Due in large part to Wave's early stage and lower name recognition, we depend upon strategic partners such as large, well established personal computer manufacturers and computer systems' integrators to establish an installed base of EMBASSY® devices sufficient to convince content providers to use our Commerce System for delivery of their content and to promote the widespread use of the ETS as a means to secure data over the Internet and other enterprise computer networks. We are dependent upon semiconductor companies to manufacture functioning EMBASSY® chips, one of

the key elements of the ETS, in sufficient numbers and at a low enough cost to enable us to convince manufacturers of personal computers to incorporate the EMBASSY® chip. We are dependent upon electronic content owners to modify their products to be used with the ETS. These partners may choose not to use our technology and could develop or market products or technologies that compete directly with us. We cannot predict whether these third parties will commit the resources necessary to achieve broad-based commercial acceptance of our technology. Any delay in the use of our technology by these partners could impede or prohibit the commercial acceptance of our products. We have no binding commitments from any of our strategic partners, and there can be no assurance that we will be able to enter into definitive agreements or that the terms of such agreements will be satisfactory.

Product defects, development or manufacturing delays may limit our ability to sell our products.

We may experience continued delays in the development and evolution of our products or the software, hardware and computing systems underlying our services. If we are unable to successfully develop products that use our technology, our technology will not be commercially viable. In addition, despite testing by us and potential customers, it is possible that our products may nevertheless contain defects. Development delays or defects could have a material adverse effect on our business if such defects and delays result in our inability to meet the market's demand. Also, manufacturing delays or our ability to procure products on a timely basis may limit our ability to sell products.

If we lose our key personnel, or fail to attract and retain additional personnel, we will be unable to continue to develop our products and technology.

We believe that our future success depends upon the continued service of our key technical and management personnel and on our ability to attract and retain highly skilled technical, management, sales and marketing personnel. Our industry is characterized by a high level of employee mobility and aggressive recruiting of skilled personnel. There can be no assurance that our current employees will continue to work for us or that we will be able to hire any additional personnel necessary for our growth. Our future success also depends on our continuing ability to identify, hire, train and retain other highly qualified technical and managerial personnel. Competition for these employees can be intense. We may not be able to attract, assimilate or retain qualified technical and managerial personnel in the future, and the failure of us to do so would have a material adverse effect on our business.

We have a limited ability to protect our intellectual property rights and others could infringe on or misappropriate our proprietary rights.

Our success depends, in part, on our ability to enjoy or obtain protection for our products and technologies under United States and foreign patent laws, copyright laws and other intellectual property laws and to preserve our trade secrets. We cannot assure you that any patent owned or licensed by us will provide us with adequate protection or will not be challenged, invalidated, infringed or circumvented.

We rely on trade secrets and proprietary know-how, which we protect, in part, by confidentiality agreements with our employees and contract partners. However, our confidentiality agreements may be breached, and we may not have adequate remedies for these breaches. Our trade secrets may also otherwise become known or be independently discovered by competitors. We also rely on intellectual property laws to prevent the unauthorized duplication of our software and hardware products. While we have and will continue to protect our software and our patented technology, intellectual property laws may not adequately protect our technology. We have registered trademark and service mark registrations with the United States Patent and Trademark Office for the marks WaveMeter and WaveNet, EMBASSY, Second Shift (the Wave juggler logo), WaveDirect and Charity Wave. Wave intends to apply for additional name and logo marks in the United States and foreign jurisdictions, as

appropriate, but we cannot assure you that federal registration of any of these trademarks will be granted.

Claims that our technology may infringe proprietary rights of third parties could have a material adverse effect on our business.

We are aware of four United States patents, each of which has some claim that, based upon what we currently know, covers certain material aspects of our technology. Therefore, the commercialization of our technology is subject to the rights of the holder of these patents unless we are able to invalidate or license such claims. Also, the holder of these patents or its licensees could seek to invalidate the claims of the patent that we have licensed and, therefore, be able to commercialize a technology similar to our technology. We can give no assurance that we would be successful in invalidating such claims or, in turn, avoid having our claims invalidated. Any proceeding involving the validity of these patents would be protracted and costly. If these other four patents are not invalid insofar as their claims relate to our technology, then we would require a license from the holder of these patents to commercialize our technology. Due to the uncertainty as to whether these other patents could be proved to be invalid, we have engaged in negotiations with the patents holder to obtain a license thereunder. As a result of these negotiations, Wave did not, however, obtain a general license to use such patents in connection with activities not connected with the licensor.

Regulation of international transactions may limit our ability to sell our products in foreign markets.

A variety of U.S. export control laws apply to our technology. We will require export licenses to export certain elements of our technology outside North America. We cannot assure you that we will be able to obtain licenses for our products. In addition, the regulation of electronic monitoring, transmitting payment instructions or audited usage and financial information varies from country to country. We may be subject to different statutory or regulatory controls in different foreign jurisdictions. Our technology may not be permitted in foreign jurisdictions. Violations of foreign regulations or regulation of international transactions could prevent us from being able to sell our products in international markets. Our success depends in large part to having access to international markets.

Our stock price is volatile.

The price of our Class A common stock has been and likely will continue to be subject to wide fluctuations in response to a number of events and factors, such as:

- quarterly variations in operating results;
- announcements of technological innovations, new products, acquisitions, capital commitments or strategic alliances by us or our competitors;
- the operating and stock price performance of other companies that investors may deem comparable to us; and
- news reports relating to trends in our markets.

In addition, the stock market in general, and the market prices for Internet-related companies in particular, have experienced significant price and volume fluctuations that often have been unrelated to the performance of the companies affected by these fluctuations. These broad market fluctuations may adversely affect the market price of our Class A common stock, regardless of our operating performance. Securities class action litigation has often been instituted against companies that have experienced periods of volatility in the market price for their securities. If we were to become the target of this kind of litigation, the cost in dollars and management attention could be substantial, and the diversion of management's attention and resources could have a material adverse effect on our business.

We may be subject to conflicts of interest that could adversely slow our corporate governance process.

Our Board of Directors has included, and is likely to include in the future, representatives of our strategic partners. It is possible that those corporations may be competing against us or each other, directly or indirectly. A director who also represents another company may voluntarily abstain from voting on matters where there could be conflicts of interest. Even if such a director does abstain, his presence on the Board could affect the process or the results of the Board's deliberations. We

have adopted no policies or procedures to reduce or avoid such conflicts. If such conflicts of interest arise, they may have a materially adverse effect on our business.

Disproportionate voting rights may affect our stock price.

Our common stock is divided into two classes; Class A common stock and Class B common stock. Each class has different voting rights. The voting rights of our Class B common stock permit the holders of Class B common stock to block mergers or similar transactions that are not approved by our Board of Directors and other transactions submitted to stockholders if any person has acquired more than 20% of our outstanding Series A common stock. The disproportionate voting power enjoyed by the Class B common stock holders when voting on questions of control may dissuade a potential merger partner or acquirer, even if the majority of the Class A common stock holders wanted the merger or acquisition to occur, and could depress the market price of the Class A common stock.

Governmental regulation may slow our growth and decrease our profitability.

There are currently few laws or regulations that apply directly to the Internet. Because our business is dependent in significant respect on the Internet, the adoption of new local, state, national or international laws or regulations may decrease the growth of Internet usage or the acceptance of Internet commerce which could, in turn, decrease the demand for our products and services and increase our costs or otherwise have a material adverse effect on our business.

Tax authorities in a number of states are currently reviewing the appropriate tax treatment of companies engaged in Internet commerce. New state tax regulations may subject us to additional state sales, use and income taxes.

Our anti-takeover provisions may discourage future acquisitions and depress our stock price.

In addition to the anti-takeover effect of the voting rights granted to the holders of our Class B common stock, a change of control may be delayed, deferred or prevented by certain provisions of our charter documents, as well as the Board of Directors' ability to issue shares of preferred stock without further vote or action by the stockholders. In addition, Delaware law restricts certain business combinations with any "interested stockholder", as defined. This statute may delay, defer, or prevent a change in control of our company. These provisions are intended to encourage any person interested in acquiring us to negotiate with and obtain the approval of our Board of Directors. Certain of these provisions may discourage a future acquisition not approved by our Board of Directors in which you might receive an attractive value for your shares or that a substantial number or even a majority of our stockholders might believe to be in their best interest. As a result, stockholders who desire to participate in such a transaction may not have the opportunity to do so. All of these factors may depress the market price of our Class A common stock.

We own or have rights to trademarks or tradenames that we use in conjunction with the offering of our products. Embassy®, WaveMeter®, WaveNet®, Great Stuff Network™, Second Shift® (the Wave juggler logo), WaveCommerce™, Wave Interactive Network™, WINPublish™, WINPurchase™, CablePC™, WaveDirect®, MyPublish™, CharityWave®, SmartSignature™, SmartSafe™, SignOnLine™

and N*Click™ are trademarks or registered trademarks used by us. All other trademarks and tradenames referred to in this prospectus are the property of their respective owners.

Use of Proceeds

The selling stockholders will receive all of the net proceeds from sales of the Class A common stock sold pursuant to this prospectus.

Selling Security Holders

An aggregate of 12,593,880 shares of Class A common stock are being registered in this offering for the account of the selling stockholders.

Concerning the Class A common stock being registered for the Investors, Wave entered into the Series H Purchase Agreements, pursuant to which Wave sold and issued 548.5 shares of Series H Stock, and the Series H Warrants in a private placement to the Investors for an aggregate purchase price of \$5,485,000 (the "Financing"). The Series H Stock and the Series H Warrants are referred to herein, collectively, as the "Series H Securities".

The Series H Stock is convertible into Class A common stock at an initial conversion price of \$0.76 per share. The conversion price will be proportionately decreased upon a stock split of the outstanding Class A common stock by Wave. The conversion price will be proportionately increased if Wave combines the outstanding Class A common stock. In the event Wave issues stock dividends, the conversion price shall be adjusted so that the holders of the Series H Stock shall receive upon conversion thereof, the number of additional shares of Class A common stock they would have received had their Series H Stock been converted into Class A common stock beforehand. Proportional adjustments are also made to the conversion price upon reclassifications, exchanges or substitutions of the Class A common stock. If Wave sells additional shares of Class A common stock or its equivalent at a price per share less than the current conversion price, such conversion price shall be adjusted using a weighted average basis for adjustment.

Dividends on the Series H Stock accrue on the initial liquidation preference amount of each share (\$10,000) at an annual rate of 10%, increasing to 12% on April 30, 2004. Subject to certain conditions, each share of Series H Stock carries a mandatory conversion provision whereby if the closing bid on Wave's Class A common stock exceeds \$1.90 for 15 of 20 consecutive trading days, the Series H Stock shall automatically convert into Class A common stock at the conversion price then in effect.

The holders of the Series H Stock have the right of first offer and refusal in any subsequent offer or sale to, or exchange with any third party of Class A common stock or any securities convertible, exercisable or exchangeable into Class A common stock, except under certain circumstances. If Wave does a private equity or equity linked financing within the one year period after April 30, 2003, the holders of the Series H Stock may exchange the Series H Stock for the securities in such financing. Certain major transactions will give the holders of the Series H Stock the right to redeem the Series H Stock at a price per share equal to 100% of the liquidation preference amount plus accrued and unpaid dividends. These transactions include:

- the consolidation, merger or other business combination of Wave with or into another entity;
- the sale or transfer of more than 50% of Wave's assets other than the sale or transfer of inventory in the ordinary course of business, the sale or transfer of the stock or assets of WaveXpress, Inc. or the sale or transfer of the assets of SignOnline; or
- acquisition by a third party of more than 50% of the outstanding shares of Class A common stock.

10

Certain triggering events will give the holders of the Series H Stock the right to redeem the Series H Stock at a price per share equal to 120% of the liquidation preference amount, plus any accrual and unpaid dividends. These triggering events include:

- if the effectiveness of this registration statement lapses for a period of ten (10) consecutive trading days, and the shares of Class A common stock into which such holder's Series H Stock can be converted cannot be sold pursuant to Rule 144(k);
- if the Class A common stock is delisted from The Nasdaq National Market, The Nasdaq SmallCap Market, OTC Bulletin Board, The New York Stock Exchange, Inc., The American Stock Exchange, Inc., or another securities exchange or quotation system for a period of five (5) consecutive days;

- if Wave is unable to comply with proper requests for conversion of any Series H Stock into shares of Class A common stock; or
- if Wave materially breaches any representation, warranty, covenant or other term or condition of the Purchase Agreements, or any other agreement delivered in connection with the Financing, unless the breach of representation, warranty, covenant or other term or condition is cured within ten (10) days.

The Series H Warrants have a five (5) year term and an initial exercise price equal to \$1.13 per share. Commencing eighteen (18) months after April 30, 2003, Wave may call up to 100% of the Series H Warrants if the market value of its Class A common stock exceeds 250% of \$1.13 (subject to adjustment pursuant to the terms of the Series H Warrants) for a minimum of fifteen (15) business days during any twenty (20) consecutive business day period.

The Series H Securities are not convertible or exercisable until the trading day following Wave's shareholder meeting which is currently planned for Monday, August 27, 2003. Wave is not obligated to issue in excess of an aggregate of 10,355,865 shares of Class A common stock (representing 19.99% of the Class A common stock outstanding before the Financing) (the "Share Cap") in connection with the Financing, unless and until the shareholders of Wave approve the issuance of Class A common stock in excess of the Share Cap. Under the terms of the Series H Purchase Agreements, Wave has agreed to solicit shareholder approval authorizing, in connection with the Financing, the issuance of shares of Class A common stock in excess of the Share Cap. Wave will not issue shares of Class A Common Stock to the Investors in excess of the Share Cap unless shareholder approval is obtained. Any shares of Class A Common Stock issuable upon conversion or exercise of the Series H Securities (the "Conversion Shares") in excess of the Share Cap will be redeemable by Wave at the option of the holders of the Series H Stock if the shareholders do not approve the issuance of Conversion Shares in excess of the Share Cap. Initially, two-thirds (2/3) of the number of initial Conversion Shares that are being registered for the Investors hereunder relate to the Series H Stock and one-third (1/3) relates to the Series H Warrants.

As part of the Financing, Wave agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the Conversion Shares. Wave agreed to bear expenses in connection with the registration and sale of these shares. See "Plan of Distribution". If this registration statement is not declared effective by the Securities and Exchange Commission on or prior to the 120th day after April 30, 2003 (or in the event an additional registration statement is filed because the actual number of shares of Class A common stock into which the Series H Stock is convertible and the Series H Warrants are exercisable exceeds the number of shares of Class A common stock initially registered is not filed and declared effective) Wave shall pay an amount as liquidated damages to each Investor equal to 3% for the first calendar month and 1.5% per calendar month thereafter or portion thereof of the Investor's initial investment in the Series H Stock, less \$10,000 per share of Series H Stock that has been converted by such Investor or redeemed by Wave.

Concerning the Class A common stock being registered for the placement agents and the sub-placement agents, Wave issued warrants (the "Placement Warrants") as partial payment to the placement agents and the sub-placement agents for services they performed in connection with the Financing. The Placement Warrants are not exercisable until the trading day following Wave's shareholder meeting that is currently planned for Monday, July 14, 2003. The Placement Warrants also have piggyback registration rights which are being exercised in this filing. Wave is bearing the expenses in connection with the registration and sale of these shares.

The following table sets forth the names of the selling stockholders, the number of shares of Class A common stock each selling stockholder beneficially owns, the number of shares which may be offered for resale pursuant to this prospectus, and the number of shares that will be owned by each selling stockholder after the completion of this offering.

As of June 30, 2003, there were 53,009,084 shares of Class A common stock outstanding. The shares offered by this prospectus may be offered from time to time, in whole or in part, by the selling stockholders or their transferees. Other than the transactions described above, there have been no material transactions between Wave and the selling security holders during the past three years.

The information included below is based upon information provided by the selling stockholders. Because the selling stockholders may offer all, some or none of their shares, we cannot provide a definitive estimate as to the number of shares that the selling stockholders will hold after the offering.

Beneficial ownership is calculated in accordance with the rules of the Securities and Exchange Commission. In computing the number of shares beneficially owned by a person, shares of common stock subject to options or warrants held by that person that are currently exercisable or become exercisable within 60 days following August 19, 2003 are deemed. Unless otherwise indicated, the persons and entities named in the table have sole voting and investment power with respect to all shares beneficially owned, subject to community property laws where applicable. The shares of Wave's Class A Common Stock being registered for the Investors are initially comprised of two-thirds (2/3) of the Class A Common Stock issuable upon conversion of the Series H Stock and one-third (1/3) of the Class A Common Stock issuable upon exercise of the Series H Warrants.

Selling Security Holder	Shares of Class A Common Stock Beneficially Owned Prior to the Offering	Shares of Class A Common Stock Being Offered	Number of Shares of Class A Common Stock Beneficially Owned After the Offering
Silver Oak Investments, Inc.(1)	914,334(2)	1,118,422(3)	0
RHP Master Fund, Ltd.(4)	457,117(5)	559,212(3)	0
Alpha Capital AG(6)	1,371,551(7)	1,677,634(3)	0
Ellis Enterprises(8)	365,733(9)	447,369(3)	0
North Sound Legacy International Ltd. (10)	274,250(11)	335,528(3)	0
North Sound Legacy Institutional Fund LLC(10)	274,250(12)	335,528(3)	0
MRT, LP(13)	182,866(14)	223,685(3)	0
OTAPE LLC(15)	457,117(16)	559,212(3)	0
CD Investment Partners, Ltd.(17)	237,736(18)	290,791(3)	0
Vertical Ventures Investments, LLC(19)	868,592(20)	1,062,500(3)	0
Norbert Olinger	45,641(21)	55,922(3)	0
National Fin. Services LLC, Phil Clark IRA R/O(22)	91,433(23)	111,843(3)	0

12

Alan Weiss	45,641(24)	55,922(3)	0
Stuart Jacobson	45,641(25)	55,922(3)	0
Judith Ellen Olinger Rev. Trust(26)	45,641(27)	55,922(3)	0
Helen Jones Marital Trust(28)	45,641(29)	55,922(3)	0
Jerden Enterprises, Inc.(30)	182,866(31)	223,685(3)	0
James K. & Danna H. Lehman	22,770(32)	27,962(3)	0
Oscar Garza and Sheryl Bilas	22,770(33)	27,962(3)	0
Martin & Linda B. Mennes	54,770(34)	67,106(3)	0
Jules Nordlicht	924,334(35)	1,118,422(3)	10,000
Arosa Investment Ltd.(36)	1,830,435(37)	2,236,843(3)	0
Falcon Point Associates(38)	702,817(39)	559,212(3)	245,700
Winslow Hedge Fund, LP(40)	457,117(41)	559,212(3)	0
Platinum Partners Value Arbitrage Fund (42)	182,866(43)	223,685(3)	0
James L. Melcher	45,641(44)	55,922(3)	0
Melcher Family Trust(45)	45,641(46)	55,922(3)	0
Balestra Capital Partners, LP(47)	91,433(48)	111,843(3)	0
Jason Adelman(49)	112,880	112,880	0
Eric Singer(50)	154,539	154,539	0
Steve Markovich(51)	2,500	2,500	0
Robert Nathan(52)	13,857	13,857	0
Matthew Balk(53)	31,224	31,224	0
Kimball & Cross Investment Management Corp.(54)	888	888	0
Brian Herman(55)	888	888	0

Chris Shufeldt(56)	887	887	0
Hudson Valley Capital Management(57)	7,107	7,107	0

- (1) Murray Todd possesses voting or dispositive power over the shares.
- (2) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 1,007,214 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (3) Includes dividends accruing for the next two years.
- (4) RHP Master Fund, Ltd. is a party to an investment management agreement with Rock Hill Investment Management, L.P., a limited partnership of which the general partner is RHP General Partner, LLC. Pursuant to such agreement, Rock Hill Investment Management directs the voting and disposition of shares owned by RHP Master Fund. Messrs. Wayne Bloch, Gary Kaminsky and Peter Lockhart own all of the interests of RHP General Partner. The aforementioned entities and individuals disclaim beneficial ownership of Wave's Class A common stock owned by the RHP Master Fund.
- (5) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 503,607 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (6) Konrad Ackerman possesses voting or dispositive power over the shares.

13

- (7) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 1,510,823 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (8) Dr. Julian Ungar possesses voting or dispositive powers over the shares.
- (9) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 402,885 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (10) Thomas McAuley possesses voting or dispositive powers over the shares.
- (11) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 302,166 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (12) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 302,166 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (13) Gregory Porges and Andrew Burton possess voting or dispositive power over the shares.
- (14) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 201,443 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (15) Ira Leventhal possesses voting or dispositive power over the shares.
- (16) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 503,607 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).

- (17) John Ziegelman possesses voting or dispositive power over the shares.
- (18) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 261,876 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (19) Joshua Silverman, as the manager of Vertical Ventures Investments, LLC, is the individual who controls the voting and investment decisions of the securities herein registered to Vertical Ventures Investments, LLC.
- (20) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 956,852 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (21) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (22) Phil Clark possesses voting or dispositive power over the shares.
- (23) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 100,722 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (24) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).

-
- (25) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (26) Judith E. Olinger possesses voting or dispositive power over the shares.
 - (27) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (28) Michael P. Rucker possesses voting or dispositive power over the shares.
 - (29) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (30) Dr. Myles Jerden possesses voting or dispositive power over the shares.
 - (31) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 201,443 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (32) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 25,181 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (33) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 25,181 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).

- (34) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 60,433 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (35) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 1,017,214 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (36) C. B. Williams possesses voting or dispositive power over the shares.
- (37) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 2,014,428 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (38) Walton I. Rutherford and Marie D. Rutherford possess voting or dispositive power over the shares.
- (39) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 749,307 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (40) Jackson W. Robinson possesses voting or dispositive power over the shares.
- (41) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 503,607 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
- (42) Mark Nordli possesses voting or dispositive power over the shares.

-
- (43) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 201,433 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (44) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (45) Carl Melcher possesses voting or dispositive power over the shares.
 - (46) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 50,362 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (47) James L. Melcher possesses voting or dispositive power over the shares.
 - (48) If Wave's shareholders approve the issuance of more than 19.99% of the outstanding Class A common stock in connection with the Financing, this amount will increase to 100,722 (including 10% dividends earned from April 30, 2003 until 60 days following June 23, 2003).
 - (49) Managing Director of H.C. Wainwright & Co., Inc., the placement agent.
 - (50) Managing Director of H.C. Wainwright & Co., Inc.
 - (51) Employee of H.C. Wainwright & Co., Inc.
 - (52) Employee of H.C. Wainwright & Co., Inc.

- (53) Employee of H.C. Wainwright & Co., Inc.
- (54) Sub-placement agent. John C. Clifford, John E. Tobin and Richard R. Laine, Jr. possess voting or dispositive power over the shares.
- (55) Employee of View Trade Securities, a sub-placement agent.
- (56) Employee of Kimball & Cross Investment Management Corp.
- (57) Affiliate of Kimball & Cross Investment Management Corp. Mark Gillis and Charles Doller possess voting or dispositive power over the shares.

PLAN OF DISTRIBUTION

We are registering the shares of Class A common stock offered in this prospectus on behalf of the selling stockholders. As used in this prospectus, the term selling stockholders includes pledgees, donees, transferees or other successors-in-interest selling shares received from the selling stockholders as a gift, partnership or liquidating distribution or other non-sale related transfer after the date of this prospectus. We will pay all expenses of registration of the shares offered, except for taxes or underwriting fees, discounts, selling commissions and legal fees of the selling stockholders. The selling stockholders will pay any brokerage commissions and similar selling expenses attributable to the sale of the shares. We will not receive any of the proceeds from the sale of the shares by the selling stockholders.

The selling stockholders may sell the shares from time to time in one or more types of transactions, including block transactions, on one or more exchanges, in the over-the-counter market, in negotiated transactions, through put or call options transactions relating to the shares, through short sales of the shares, or a combination of these methods of sale. The selling stockholders may sell their shares at market prices prevailing at the time of sale, or at negotiated prices.

16

The selling stockholders may use brokers or dealers to sell their shares. As of the date of this prospectus, we have not been advised by the selling stockholders that they have made any arrangements as to the distribution of shares covered by this prospectus.

The selling stockholders may sell their shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholders and/or the purchasers of shares for whom broker-dealers may act as agents or to whom they sell as principal, or both. Compensation as to a particular broker-dealer might be in excess of customary commissions.

The selling stockholders and any broker-dealers that act in connection with the sale of the shares might be deemed to be "underwriters" as the term is defined in Section 2(11) of the Securities Act of 1933. Consequently, any commissions received by these broker-dealers and any profit on the resale of the shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act of 1933.

Because the selling stockholders may be deemed to be "underwriters" as defined in Section 2(11) of the Securities Act of 1933, the selling stockholders may be subject to the prospectus delivery requirements of the Securities Act of 1933, as amended.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that Rule.

Upon being notified by any of the selling stockholders that they have entered into any material arrangement with a broker-dealer for the sale of the shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act of 1933, regarding the plan of distribution.

We have agreed to indemnify the selling stockholders against certain liabilities, including liabilities arising under the Securities Act of 1933, or to contribute to payments which any of the selling stockholders may be required to make in respect hereof. The selling stockholders have agreed to indemnify us against certain liabilities, including liabilities arising under the Securities Act of 1933, as amended.

RECENT DEVELOPMENTS

In connection with the issuance of the Series H Securities, Wave recorded a beneficial conversion feature discount of approximately \$3,000,000 in the quarter ended June 30, 2003. In addition, approximately \$1,500,000 was allocated to the Series H Warrants that was recorded as an additional discount to the Series H Stock. Wave utilized the Black Scholes option pricing model to calculate the fair value of the Series H Warrants. The fair value of the Series H Stock was calculated as the number of shares of Class A common stock that the Series H Stock is convertible into, multiplied by the closing price of Wave's Class A common stock on Nasdaq on the closing date of the Financing.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for Wave by Bingham McCutchen LLP, New York, New York.

EXPERTS

The consolidated financial statements of Wave Systems Corp. and Subsidiaries (a development stage corporation) as of December 31, 2002 and 2001, and for each of the years in the three-year

17

period ended December 31, 2002 and for the period from February 12, 1988 (inception) through December 31, 2002 have been incorporated herein by reference and in the registration statement in reliance upon the report of KPMG LLP, independent certified public accountants, incorporated herein by reference, and upon the authority of said firm as experts in accounting and auditing.

The audit report covering the December 31, 2002 consolidated financial statements contains an explanatory paragraph that states that Wave's recurring losses from operations and accumulated deficit raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

MATERIAL CHANGES

On July 31, 2003, Wave announced an agreement with Intel Corporation that will help enable both companies to accelerate the development and deployment of trusted applications and services for safer computing on personal computer platforms. The agreement will enable Intel to bundle Wave's software and services with a future Intel desktop motherboard, targeted for trusted computing platforms. Similar in nature to a previously announced March 2003 licensing agreement between Wave and National Semiconductor, Intel will pay a royalty fee to Wave for each unit shipped. This licensing agreement is non-exclusive and there are no minimum licensing requirements on the part of Intel pursuant to the agreement. Intel plans to introduce the new motherboard in the fourth quarter of 2003.

On August 4, 2003, Wave announced that it has partnered with IBM's Independent Software Vendor (ISV) Program. Wave's new Document Manager Vault and SmartSignature security software applications in Wave's EMBASSY® Trust Suite client software family now work with the IBM Embedded Security Subsystem, a hardware and software-based security

solution available on select ThinkPad notebooks and ThinkCentre desktops. Wave's partnership with IBM enables Wave in its objective to sell and deliver open and interoperable solutions to business customers as trusted computing continues to evolve. This licensing agreement is non-exclusive and there are no minimum licensing requirements on the part of IBM pursuant to the agreement. Wave will try to interest other security chipmakers and motherboard suppliers in its product in the coming months.

Where You Can Find More Information

We are subject to the periodic filing requirements of the Securities Exchange Act of 1934. Further to our obligations under the Exchange Act, we file reports, proxy and information statements and other information with the Securities and Exchange Commission. These reports, proxy and information statements and other information may be inspected and copied at the public reference facilities of the Securities and Exchange Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of these materials also can be obtained from the Public Reference Section of the Securities and Exchange Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, upon payment of prescribed fees. The Securities and Exchange Commission also maintains a site on the World Wide Web that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission (including Wave). The address of this site is <http://www.sec.gov>.

We have filed a registration statement on Form S-3 with the Securities and Exchange Commission to register under the Securities Act of 1933 the securities that this prospectus offers. In accordance with the rules and regulations of the Securities and Exchange Commission, portions of the registration statement have been omitted from this prospectus. Therefore, this prospectus contains only some of the information in the registration statement. If you would like more information about Wave and the securities this prospectus offers, please refer to the registration statement, which is on file at the offices of the Commission. You may obtain copies of these documents upon payment of the fee, or you may examine them without charge at the offices or via the Web site. When we discuss other documents in

this prospectus, we may not provide all of the information about or contained in those other documents. You should not rely upon this prospectus to provide a complete discussion of the contents of other documents. You should refer to those other documents yourself. Whenever we discuss the contents of other documents, we qualify our statements in all respects by reference to the applicable documents on file with the Commission.

In addition to historical information, this prospectus and the registration statement contain forward-looking statements. These statements and projections about the future involve risks and uncertainties. As a result, we may not be able to accurately predict the future and our actual results may turn out to be materially different from what we anticipate and discuss in this prospectus. In addition, we operate in an industry segment where securities prices may fluctuate dramatically and may be influenced by regulatory and other factors beyond our control. We discuss the factors which we believe to be important in the cautionary statements that accompany the forward-looking statements and in the risk factors section of this prospectus. Whenever you assess a forward-looking statement in this prospectus, we urge you to read carefully all of the risk factors and cautionary statements in this prospectus, as well as those in our other filings with the Securities and Exchange Commission.

You should rely only upon the information contained in this document or that to which we have referred you. We have not authorized anyone to provide you with additional information or information that is different. This prospectus is not an offer to sell or an invitation of an offer to buy any of the securities offered hereby to any person in any jurisdiction in which it is unlawful to do so. The information contained in this prospectus is accurate as of its date, regardless of the time of the delivery of this prospectus or of any sale of the Class A common stock; changes may have occurred since.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate into this prospectus information we file with the SEC in other documents. The information incorporated by reference is considered to be part of this prospectus and information we later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 until all of the shares of common stock that are part of this offering have been sold. The documents we have incorporated by reference are:

- our Current Report on Form 8-K, filed on August 12, 2003;
- our Current Report on Form 8-K, filed on May 7, 2003;
- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2003;
- our Quarterly Report on Form 10-Q/A for the quarter ended March 31, 2003;
- our Annual Report on Form 10-K/A for the year ended December 31, 2002; and
- the description of our common stock contained in our Registration Statement on Form 8-A.

You may request a copy of these filings at no cost by writing or telephoning Wave Systems Corp., 480 Pleasant Street, Lee, Massachusetts 01238, (413) 243-1600.

20

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

Expenses of the Registrant in connection with the issuance and distribution of the securities being registered are estimated as follows:

Description	Amount
Sec Registration Fee	\$ 1,112
NASD Fee	1,709
Legal Fees	100,000
Independent Accountant Fees	30,000
Printing Fees	10,000
Total	\$ 142,821

Item 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law empowers a Delaware corporation to indemnify its officers and directors and certain other persons to the extent and under the circumstances set forth therein. Wave's Amended and Restated Certificate of Incorporation and Amended and Restated By-laws provide for indemnification of its officers and directors and certain other persons against liabilities and expenses incurred by any of them to the fullest extent authorized by the Delaware General Corporation Law.

The Amended and Restated Certificate of Incorporation authorizes Wave to obligate itself to indemnify any and all persons whom it shall have power to indemnify from and against any and all of the expenses, liabilities or other matters referred to in or covered by Section 145 of the Delaware General Corporation Law, for monetary damages for breach of fiduciary duty as a director or officer, except for liability (i) for any breach of the director's or officer's duty of loyalty to Wave or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, as the same exists or hereafter may be amended, or (iv) for any transaction from which the director or officer derived an improper personal benefit. If the Delaware General Corporation Law hereafter is amended to authorize the further elimination or limitation of the liability of directors or officers, then the liability of a director or officer, in addition to the limitations on personal liability provided herein, shall be limited to the fullest extent permitted by the amended General Corporation Law of the State of Delaware.

The Restated By-laws provide that each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative because he or she is or was a director, officer, employee or agent of Wave shall be indemnified and held harmless by Wave to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended, against all expense, liability and loss (including attorneys' fees) reasonably incurred or suffered by such person in connection therewith and such indemnification shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of his or her heirs, executors and administrators. If a claim is not paid in full by Wave within sixty days after a written claim has been received, the claimant may at any time thereafter bring suit against Wave to recover the unpaid amount of the claim.

II-1

Item 16. EXHIBITS AND FINANCIAL STATEMENTS AND SCHEDULES

Exhibit No.	Description of Exhibit
4.1	— Certificate of Designation of the Relative Rights and Preferences of the Series H Convertible Preferred Stock of Wave, dated as of April 30, 2003 (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003)
5.1	— Opinion of Bingham McCutchen LLP with respect to the legality of the shares being offered
23.1	— Consent of Bingham McCutchen LLP (included as part of Exhibit 5 hereto)
23.2	— Consent of KPMG LLP, Independent Certified Public Accountants
24*	Power of Attorney(Incorporated by reference to Wave's Registration Statement on Form S-3 filed on June 30, 2003. (File No. 333-106632))
99.1*	— Form of Series H Convertible Preferred Stock Purchase Agreement, dated as of April 30, 2003 (the "First Purchase Agreement"), by and among Wave and the purchasers of the Series H Convertible Preferred Stock (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003).
99.2*	— Form of Series H Convertible Preferred Stock Purchase Agreement, dated as of April 30, 2003 (the "Second Purchase Agreement"), by and between Wave and

an individual purchaser (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003).

- 99.3* — Form of Registration Rights Agreement by and among Wave and the purchasers of the Series H Convertible Preferred Stock, dated as of April 30, 2003 (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003).
- 99.4* — Form of Warrant issued by Wave pursuant to the First Purchase Agreement to each of the purchasers of the Series H Convertible Preferred Stock, dated as of April 30, 2003 (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003).
- 99.5* — Form of Warrant issued by Wave pursuant to the Second Purchase Agreement to the individual purchaser, dated as of April 30, 2003 (Incorporated by reference to Wave's Form 8-K filed on May 5, 2003).
- 99.6* — Form of Warrant issued by Wave to the Agents, dated as of April 30, 2003. (Incorporated by reference to Wave's Form S-3, File No. 333-99469, filed on May 15, 2003)

*Incorporated by reference

(b) Financial Statement Schedules:

All schedules have been omitted since they are either not required or not applicable.

Item 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

II-2

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(3) To request for acceleration of the effective date of this registration statement and any amendments thereto.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

In the event that a claim for indemnification against such liabilities, other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act or 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Lee, Commonwealth of Massachusetts, on the 19th day of August, 2003.

Wave Systems Corp.

By: /s/ STEVEN K. SPRAGUE

Name: Steven K. Sprague
Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Steven Sprague, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ STEVEN K. SPRAGUE Steven K. Sprague	President, Chief Executive Officer and Director	August 19, 2003
/s/ JOHN E. BAGALAY, JR. John E. Bagalay, Jr.	Acting Chairman	August 19, 2003
/s/ GEORGE GILDER George Gilder	Director	August 19, 2003
/s/ JOHN E. MCCONNAUGHY, JR. John E. McConnaughy, Jr.	Director	August 19, 2003
/s/ NOLAN BUSHNELL Nolan Bushnell	Director	August 19, 2003
/s/ GERARD T. FEENEY Gerard T. Feeney	Senior Vice President, Finance and Administration, Chief Financial Officer and Secretary (Principal Financial Officer, Principal Accounting Officer and Duly Authorized Officer of the Registrant)	August 19, 2003

II-4

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 5.1

August 19, 2003

Wave Systems Corp.
480 Pleasant Street
Lee, MA 01238

Re: *Registration Statement on Form S-3*

Ladies and Gentlemen:

We have acted as counsel for Wave Systems Corp., a Delaware corporation (the "Company"), in connection with the

registration under the Securities Act of 1933, as amended (the "Act"), of 12,593,880 shares of Class A common stock, \$0.01 par value per share, of the Company (the "Shares"), to be offered by certain stockholders of the Company (the "Selling Stockholders"), pursuant to a Registration Statement on Form S-3, filed by the Company with the Securities and Exchange Commission on August 19, 2003.

We have reviewed the corporate proceedings of the Company with respect to the authorization of the issuance of the Shares. We have also examined and relied upon originals or copies of such agreements, instruments, corporate records, certificates and other documents as we have deemed necessary or appropriate as a basis for the opinions hereinafter expressed. In our examination, we have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form, and the legal competence of each individual executing any document. We have further assumed that the registration requirements of the Act and all applicable requirements of state laws regulating the sale of securities will have been duly satisfied.

Subject to the limitations set forth below, we have made such examination of law as we have deemed necessary for the purposes of this opinion. This opinion is limited solely to the Delaware General Corporation Law as applied by courts located in Delaware, the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting those laws.

Based upon and subject to the foregoing, we are of the opinion that the 12,539,880 Shares issuable upon conversion and exercise of the Series H Convertible Preferred Stock and the related Warrants and upon payment of dividends accruing on such Series H Convertible Preferred Stock have been duly authorized by all requisite corporate action on the part of the Company, all such Shares have been duly reserved for issuance and all such Shares, when issued upon conversion, exercise or payment of dividends, will be duly and validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

BINGHAM MCCUTCHEN LLP

QuickLinks

[Exhibit 5.1](#)

[QuickLinks](#) -- Click here to rapidly navigate through this document

Exhibit 23.2

Independent Auditors' Consent

The Board of Directors and Stockholders
Wave Systems Corp.:

We consent to the use of our report incorporated by reference herein and to the reference to our firm under the heading "Experts" in the prospectus and registration statement.

Our report dated March 31, 2003 contains an explanatory paragraph that states that the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about its ability to continue as a going

concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

KPMG LLP

Boston, Massachusetts
August 19, 2003

QuickLinks

Independent Auditors' Consent

End of Filing

Powered By **EDGAR**
Online
© 2004 | EDGAR Online, Inc.